

LISTING OF CLAIMS:

1. (Currently Amended) ~~Method~~ A method for determining the ~~an~~ angular displacement $\langle\phi_o\rangle$ of the ~~the~~ an output shaft $\langle 24 \rangle$ of an impulse nut runner at tightening of a screw joint to a desired final torque level $\langle T_f \rangle$, wherein the impulse nut runner includes an impulse unit $\langle 23 \rangle$ with a motor driven inertia drive member $\langle 27 \rangle$ delivering one torque impulse per full revolution relative to the output shaft $\langle 24 \rangle$, and an angle sensing device $\langle 35, 38 \rangle$ arranged to detect ~~the~~ a rotational movement $\langle\phi_D\rangle$ of the inertia drive member $\langle 27 \rangle$, said method comprising ~~the following steps:~~

defining a threshold torque level $\langle T_t \rangle$ from which the rotational movement $\langle\phi_D\rangle$ of the inertia drive member $\langle 27 \rangle$ ~~shall~~ is to be detected,

determining ~~the~~ a total rotation angle $\langle\phi_{Dtot}\rangle$ of the inertia drive member accomplished by ~~the~~ a total number of torque impulses $\langle N_{tot} \rangle$ counted from said threshold torque level $\langle T_t \rangle$, and

calculating ~~the~~ a total angular movement $\langle\phi_{otot}\rangle$ of the output shaft $\langle 24 \rangle$ accomplished by the total number of torque impulses $\langle N_{tot} \rangle$ counted from said threshold torque level $\langle T_t \rangle$ by reducing said determined total rotation angle $\langle\phi_{Dtot}\rangle$ of the inertia drive member $\langle 27 \rangle$ counted from said threshold torque level $\langle T_t \rangle$ by the total angular movement $\langle\phi_{Ntot}\rangle$ of said total number $\langle N_{tot} \rangle$ of full revolutions minus one full revolution, $\langle (N_{tot} - 1) \cdot 360^\circ \rangle$.

2. (Currently Amended) ~~Method~~ The method according to claim 1, wherein said threshold torque level $\langle T_t \rangle$ is a predetermined percentage of the desired final torque level $\langle T_f \rangle$.